

CHAPTER 4

INPUT PROCESSING

A. REMOTE TERMINAL INPUT SYSTEM

1. The RTIS, as described in DLAM 4185.15 (reference (g)), is the on-line system for processing data into the DTIC R&TWUDB. It is used by the DoD community and contractors, and by government organizations that subscribe to the on-line system to contribute and control WUIS input records through remote terminals.

2. Records may be input via synchronous UNIVAC 100 or 200 terminals or via asynchronous dial-up terminals. The subsystem performs an on-line edit of data elements as they are entered. The records can be corrected, stored, and flagged for removal by DTIC for updating the master file through a batch interface program. This is particularly useful for those activities having limited amounts of input throughout the year, as well as for making corrections to current records recently processed into the WUIS data base.

B. FILE MAINTENANCE - CORRECTIONS TO RECORDS OTHER THAN AN UPDATE

1. The file maintenance transaction codes 3, 4 and R provide a method to submit corrections to a previously established record without altering either the status of record or changing the date of summary. All data fields other than the control fields may be added, changed, or deleted by the R transaction. Transaction codes 3 or 4 shall be used only to modify keywords (field 22). The effect of a 3 transaction is to enter an additional keyword without having to reenter the entire field. The 4 transaction is used to delete a keyword without reentering the entire field. When using any of the file maintenance transactions, it is necessary to enter, in addition to the control fields, only the specific data fields to be corrected, added or deleted.

2. An incorrect date of summary (field 2) cannot be changed by an R transaction. If an inaccurate date is inadvertently entered, it is necessary to submit a D CHANGE transaction.

C. CARD-TAPE INPUT1. Description

a. The first step in the WUIS input process is to convert the input card image magnetic tapes or 80-column cards to UNIVAC Fielddata code for processing on the UNIVAC 1182. The output tapes are then sorted by accession number, transaction type and transaction date for input to the edit and update program.

b. During the edit and update program the agency accession number of an input transaction is first compared to the accession numbers recorded on the existing master file. If no match is found, a NEW type record is created in main memory, provided all critical control fields are present. If the agency accession of an updating transaction has a match on the master file, an image of the master file record is read into the main memory.

c. The data elements of an updating transaction are superimposed on the record if the transaction contains all critical control fields. Multiple transactions in the same updating run are accommodated. As long as the transactions are not exact duplicates, they are overlaid sequentially with the final image a composite of all transactions.

d. Edit and audit processes then are carried out on the updated record in main memory. An edit or audit detected error in the record generates error messages to be displayed in the feedback documents.

e. Once all of the transaction data for a particular accession number have been moved into the newly created or updated record in main memory and the edit and audit routines performed, the record is released to the master or direct file. In addition, this program also creates transactions to update the WUIS inverted file.

f. In the inverted file, the primary keys are the retrieval terms that were originally recorded as part of the master file records. The inverted file is maintained by posting under each retrieval term, the accession numbers of the records containing that term. This technique allows rapid and efficient file search by term. This is the opposite of a direct file in which all data elements describing a record are posted to an accession number. The terms "master file" and "direct file" are used interchangeably.

2. Contributor Feedback. The edit and update cycles produce documents of use to the contributors. These documents provide notices of the status of all submitted transactions, exact statements of content and severity of errors, and a picture of each record as it was updated on the master file.

a. Transaction Error and Rejection List (Table 4-1, Example 1). This list provides a listing of all card images submitted for a transaction which was rejected upon edit, that is, no part of which may be processed. A transaction so rejected shall be corrected and resubmitted in its entirety. Descriptions of the necessary contributor actions to correct and resubmit the rejected transactions accompany the following explanations of rejection causes.

(1) New Transaction for Existing Record. An "A" NEW-type transaction is submitted for an agency accession number already established on the master file. If the contributor wishes to update the summary, an UPDATE transaction containing the critical control fields and all fields to be updated shall be submitted.

(2) Change Transaction for Nonexistent Record. An UPDATE transaction is submitted for an agency accession not found on the master file. Before transactions to update a record can be submitted, the contributor first shall submit a complete NEW type transaction for that agency accession.

(3) Invalid Transactions - Control Information Field. One or more of the critical control fields is **blank** or contains an invalid entry. The contributor **shall** correct the errors and resubmit the entire transaction.

(4) Illegal Character in Digraph or Accession Number or A01 Card Containing the Critical Control Fields is Missing. The contributor shall correct the errors, supply the missing A01 card, and resubmit the entire transaction.

(5) Duplicate Transaction Error. Two transactions containing exactly the same data were submitted. The second transaction was rejected. No contributor action is necessary since the first transaction was accepted on the file.

b. Contributor Summary List (CSL) (Table 4-1, Example 2). This is a format that shows the data content of the record as it exists on the master file after application of the transactions. All errors resulting from the edit and audit of the updated record are also listed. The contributor shall submit an UPDATE transaction to correct catastrophic errors before the record can be retrieved on an output. Other error statements should be reviewed and corrected by submission of an UPDATE transaction

c. WUIS Direct File Status Report (Table 4-1, Example 3). This provides a complete list or index of every record on the updated WUIS direct file and is a product of the update cycle. It contains all of the A01 card data elements plus the processing date, status, and the security of all classifiable fields.

D. INPUT TRANSMITTAL

1. Data shall be submitted by the contributor to the R&TWUIS in machine-readable form, either as punched cards or card image magnetic tape, or via RTIS.

2. Input from the contributor other than that submitted by RTIS must be accompanied by DTIC Form 112, "R&T Work Unit Information System Input Transmittal Form" (figure 4-1) completed in the following manner:

a. Section 1: Provide a file count by kind of summary (transaction type) both for the number of reports and the number of cards or card images submitted.

b. Section 2: Indicate whether the material is being submitted in the form of card image magnetic tape or punch cards. Include the number of tape reels or the number of card boxes or packages enclosed.

c. Section 3: Insert the information from the external tape label that identifies the file by reel. If the file involves more than 3 reels of input, use an additional transmittal form, completing only section 3, the reporting agency and date of submission.

(1) The physical reel number is the number permanently assigned to a reel of magnetic tape for identification of the actual reel regardless of file content.

(2) File identification, creation date, EOR, and EOF signals are explained in Chapter 3. section B. Conclude a single reel input with an EOF signal. "

(3) Enter the number of summaries only on the final reel or single reel input file.

d. Section 4: Indicate what backup material is accompanying the machine-readable input by a check in the appropriate blocks. Insert the number of source documents or tape listings if applicable.

e. The responsible individual shall be the representative of the reporting DoD Component who can be contacted on any problems or questions concerning the input.

E. TRANSMITTAL OF FEEDBACK TO CONTRIBUTORS

Feedback documents shall be transmitted to the contributor accompanied by a DTIC Form 82, "Notification of Processing Work Unit Data Base Input" (figure 4-2). The number of transactions entered in subparagraphs 2a., 2.b., and

2.c. of the figure shall agree with the total number of transactions included in the contributor^s last submission. Any summaries in the category described in subparagraph 2.b. shall be corrected in the contributor's next updating submission. These summaries as they are shown on the updated image in the transmittal CSL are not available for retrieval until all nonreleasable errors are corrected.

EXAMPLE 1, TRANSACTION ERROR OR REJECTION LIST

MAR 12, 1984

REGISED! T/UPDATE TRANSACTION
ERROR AND STATISTIC LIST*
OATA BANK I WUIS)

DN 994027	ADDED	COMPLETE
DN 994028	ADDED	INCOMPLETE
ON 994029	ADDED	COMPLETE
DN 997000	REPLACES	INCOMPLETE
DN 997203	REPLACES	COMPLETE
DN 997206	REPLACES	COMPLETE
ON 997506	REPLACES	INCOMPLETE
ON 998051	REPLACES	COMPLETE
ON 998075	REPLACES	INCOMPLETE
ON 998083	REPLACES	INCOMPLETE
ON 998250	REPLACES	COMPLETE
DN 998251	REPLACES	COMPLETE
ON 998252	REPLACES	COMPLETE
ON 998254	REPLACES	COMPLETE
Os 000020	REPLACES	INCOMPLETE

EXAMPLE 2, CONTRIBUTOR SUMMARY LIST

UNCLASSIFIED

PAGE 4299
MAR 12, 1984

REFERENCE NUMBER 15 1403

ACCESSION NUMBER: 0S000020

EDIT ERRORS

THE FOLLOWING INPUT CARO FIELDS OR SUBFIELDS CONTAINED INVALID CODES OR CHARACTERS
S AND T FIELD AND GROUP CODE - THIRD

AUDIT ERRORS

ERROR	P.E.(CONTRIB.) WITHOUT ALL SUBFIELDS
ERROR	P.M. C OR D FIELDS 17AI - 17F NOT BLANK
ERROR	C/G CUM. 00LLAR VS PERF.METH.

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UNCLASSIFIED

EXAMPLE 2, CONTRIBUTOR SUMMARY LIST - continued

REFERENCE NUMBER 15 1403

UNCLASSIFIED

PAGE 4300
MAR 12, 1984

ACCESSION NUMBER: DS000020 (CONT.)

POST-EDIT SUMMARY

DATE OF SUMMARY 84-02-15	PREV. DATE RECEIPT OATE 83-10-01	84-03-08	KIND OF SUMMARY D	SUMMARY SECURITY u	WORK SECURITY c	REGRADING	LEVEL OF SUMMARY A		
DISTRIBUTION INSTRUCTIONS ADDED SEC RESTRICTION CONTR-ACCESS\$S&A CODE SEA REL. MODELS FGN INT FOREIGN RSCH/STUDY CODE									
Cx									
PRIMARY ELEMENT CODE OMN PROJECT NO. NSEA TASK AREA NO s WORK UNIT NO 712-WS63	CONTRIBUTING ELEMENT CODE O PROJECT NO. O TASK AREA NO.		CONTRIBUTING ELEMENT CODE 61 PROJECT NO. ACOUSTIC REC TASK AREA NO. ON/SRCH		PRIOR ELEMENT CODE PROJECT NO. TASK AREA NO. WORK UNIT NO.		PRIM INSTLATN PRIM I.1ONITOR DIV		
TITLE: (U) SPHERICAL ARRAY FIELD/GROUP CODES: 2001 ACOUSTICS 1501 ANTISUBMARINE WARFARE									
CIV/MIL APPLICATION M	START DATE 82 06	ESTIMATED COMPL. DATE 87 09	PRIMARY FUNDING AGENCY DN	OTHER FNO AGENCY	OTHER FNO AGENCY				
PERFORMANCE METHOD C	CONTR/GRT EFFECTIVE DATE	CONTR/GRT EXPIRATION OATE	CONTRACT TYPE	PARTIAL CONTR/GRT CODE					
CONTR/GRT NUMBER	CONTR/GRT AMOUNT 000000000	KIND OF AWARD	CONTR/GRT CUMULATIVE DOLLAR TOTAL CUM PTL C/G COE 000000000						
MANYEARS: CURR FY 00000.7	CFY-1 00001.1	CFY-2 00000.3	CFY-3	CFY+1	FUNDS: CURR FY 000090	CFY-1 000128	CFY-2 000033	CFY-3	CFY+1
SUBELEMENT CODE	RESP. ORG SYMBOL/DIGRAPH		PRINCIPAL IN VEST.ORG SYMBOL						
RESPONSIBLE DOO ORGANIZATION				PERFORMING ORGANIZATION					
NAME : DEFENSE TECHNICAL INFORMATION CENTER				NAPE : DEFENSE TECHNICAL INFORMATION CENTER					
ADDRESS: CAMERON STATION, ALEXANDRIA, VA 22314				ADDRESS: CAMERON STATION, ALEXANDRIA, VA 22314					
IDENTIFICATION CODE: 107200				CASE IDENTIFICATION: N.A					
LOCATION COOE : 5110				IDENTIFICATION CODE: 107200					
RESPONSIBLE INDIVIDUAL: HATTON* J				LOCATION CODE : 5110				TYPE CODE	

UNCLASSIFIED

EXAMPLE 7, CONTRIBUTOR SUMMARY LIST - continued

UNCLASSIFIED

PAGE 4301
MAR 12, 1984

REFERENCE NUMBER 15 1403

TELEPHONE : 202-692-7044

ACCESSION NUMBER: D5000020 (CONT.)

INVESTIGATORS
PRINCIPAL : GARRETT, M
TELEPHONE : 202-2746875
ASSOCIATE (1) :
ASSOCIATE(2) :

CLASSIFICATION AUTHORITY:
DATE OF DECLASS: DECLASS EVENT:
DATE OF DNGRADE: DNGRADE EVENT:
CLASS DURATION:

ARMY CODED MISSION OBJECTIVES:

ARMY NARRATIVE MISSION OBJECTIVE:

KEYWORDS: (U) SAMPLE; (U) TRAINING ;

TECHNICAL OBJECTIVE: (U) THIS SUMMARY HAS BEEN CREATED FOR DEMONSTRATION PURPOSES.

APPROACH: (u) NONE.

PROGRESS : (u) NONE,

EVALUATION:
TERMS ASSIGNED BY DTIC

DESCRIPTORS:
IDENTIFIERS:

UNCLASSIFIED

Co

EXAMPLE 3, WUIS DIRECT FILE STATUS REPORT

DATE 020184

PAGE 819

WUIS DIRECT FILE ACCESSION NUMBER ANALYSIS CYCLE NUMBER 011

SERVICE: DA

ACC . NO.	OATE SUMM	PREV OATE	PRoc DATE	KO SM	SM SC	WK SC	RG	DI IS	AD RS	PROGRM ELEMNT	PROJECT	TASK	WORK UNIT	SECURITIES T K O A P D I T	S
DA300369	831031	621119	831216	D	U	u		Cx		62618A	1L162618AH80	00	002	U U U U U U	C
DA300370	821001		821208	A	u	u		Cx		63739A	20263739A 793	0103		U U U U U U	C
0A300371	821101	821101	830119	K	u	T		CX		o				U U U U U U	I
DA300372	821006		821208	A	u	s		BU		0	o	o	000	U U U U U U	C
DA300374	830919	821103	830930	K	u	u		CX		61101A	1L161101A91A	00	012	U U U U U U	C
DA300375	630921	830308	830930	o	u	u		CX		61101A	1L161101A91A	00	003	U U U U U U	C
DA300376	821206		821208	A	u	u		CX		61102A	1L161102BH57	04	512	U U U U U U	C
DA3D0377	830610	821206	830630	o	U	u		CX		61102A	1L161102BH57	06	436	U U U U U U	C
DA300378	831212	830921	831230	0	u	u		CX		61101A	1L161101A91A	00	008	U U U U U U	C
DA300379	830919	821119	830930	0	u	u		Cx		61101A	1L161101A91A	00	008	U U U U U U	C
DA300380	821008		821217	A	u	u		Cx		61101A	EMW-E - 1025	00	001	U U U U U U	C
DA300381	830615	821209	830630	D	u	u		Cx		61102A	1L161102BH57	06	710	U U U U U U	C
DA300382	830315	821207	830331	K	u	s		CX		o	o	0		U U U U U U	I
DA300383	831001	821015	831216	o	u	c		ox		0VIDES	1G464221D208	0	0	U U U U U U	C
DA300385	821008		821217	A	u	s		CX		o				U U U U U U	C
DA300386	631103	831014	831216	o	u	u		Cx		62727A	1X162727A230	00	000	U U U U U U	C
DA300387	830930	820930	831007	0	u	u		Cx		61101A	1L161101A91A	0034	310	U U U U U U	C
DA300388	830919		831230	0	u	u		Cx		62720A	1L1627200048	of	274	U U U U U U	C
DA300390	830901	820901	830907	D	u	u		Cx		61102A	1L161102AH68	00	609	U U U U U U	C
DA300391	830919		831230	K	u	u		Cx		63752A	1M263752A994	00	000	U U U U U U	C
0A300392	830901	820901	830907	D	u	u		Cx		61102A	1L161102AH68	00	611	U U U U U U	C
DA300393	831216	821201	831230	D	u	u		Cx		61102A	1L161102B74A	00	037	U U U U U U	C
DA300394	830926	830926	831230	o	u	u		CX		63752A	1M263752A994	00	000	U U U U U U	C
DA300395	831216	821201	831230	H	u	u		CX		62716A	1L162716AH70	00	073	U U U U U U	C
0A300396	831205	831020	831216	D	u	u		BU		63304A	6X3633040215	00	000	U U U U U U	C
DA300397	831205	831024	831216	D	u	s		BU		63304A	8X3633040215	00	000	U U U U U U	C
DA300398	831205	831020	831216	o	u	u		BU		63304A	8X3633040215	00	000	U U U U U U	C
DA300399	821105		821217	A	u	u		Cx		62727A	1X162727A230	A230	000	U U U U U U	C
0A300400	830926		831230	H	u	u		Cx		63752A	1M263752A994	00	000	U U U U U U	I
DA300401	821105		821217	A	u	u		Cx		62727A	1X162727A230	A230	000	U U U U U U	C
04300402	821001	811001	830119	o	u	u		CX		61102A	3M161102BS10	00	235	U U U U U U	C
0A300405	631114	821122	831216	0	u	u		Cx		63750A	3M463750D808	AA	030	U U U U U U	C
DA300406	821215		821231	A	u	c		CX		62622A	1L162622A554	AO	020	U U U U U U	C
DA300407	821215		821231	A	u	u		CX		62622A	1L162622A554	BO	005	U U U U U U	C
DA300408	821215		821231	A	u	u		Cx		62706A	1L162706A553	10	008	U U U U U U	C
DA300409	821215		621231	A	u	u		CX		62706A	1L162706A553	00	006	U U U U U U	C
0A30Q410	821215		821231	A	u	u		Cx		61102A	1L161102A71A	AO	023	U U U U U U	C
0A300411	630615	821215	830630	o	u	u		CX		61102A	1L161102BH57	08	709	U U U U U U	C
DA300412	621215		821231	A	u	u		Cx		61102A	1L161102BH57	03	392	U U U U U U	C
0A30D414	830314	630314	831216	D	u	u		Cx		62209A	1L162209AH76	H76D	033	U U U U U U	C
DA300415	830608	821215	830622	o	u	u		Cx		738017	A50030191RB	00	043	U U U U U U	C
DA300416	831001	821001	831216	D	u	u		Cx		62775A	3S162775A825	AA	085	U U U U U U	C
0A300417	831001	821001	831216	D	u	u		Cx		62775A	3S162775A825	AA	084	U U U U U U	C
DA300418	831001	821001	631216	o	u	u		CX		61102A	3M161102BS10	DA	436	U U U U U U	C
0A300419	831001	821001	831216	0	u	u		Cx		61102A	3M161102BS10	OA	438	U U U U U U	C
DA300420	831001	821001	831216	D	u	u		Cx		62775A	3S162775A825	AA	061	U U U U U U	C
0A300421	831001	821001	831216	o	u	u		Cx		62775A	3S162775A825	AA	082	U U U U U U	C
DA300422	831205	821216	831216	0	u	s		BU		63304A	8X363304D215	0000	000	U U U U U U	C
DA300423	831001	821001	831216	D	u	u		Cx		62775A	3S162775A825	AA	083	U U U U U U	C
DA300425	830524	830124	830531	K	u	s		EP		o	o		000	U U U U U U	C
DA300426	831001	821001	831216	o	u	u		Cx		61101A	3A161101A91C	00	293	U U U U U U	C

<div>R&T WORK UNIT INFORMATION SYSTEM INPUT TRANSMITTAL FORM</div> <div>Submit this form with machine-readable work unit data and accompanying DD Form 1498 source documents and unformatted file listings to : DEFENSE TECHNICAL Information CENTER (DTIC-TIR) CAMERON STATION, ALEXANDRIA, VIRGINIA 22314</div>			
STATISTICAL SUMMARY OF TRANSACTION FILE CONTENTS:			
TRANSACTION TYPE		NUMBER OF SUMMARIES	NUMBER OF PUNCH CARDS OR CARD IMAGES
NEW	I	I	
CHANGE			
TERMINATION			
COMPLETION			
CORRECTION			
TOTAL			
FORM OF MACHINE-READABLE INPUT:			
<div><input type="checkbox"/> MAGNETIC TAPE, NO. OF REELS _____</div> <div><input type="checkbox"/> PUNCH CARDS, NO. OF <u>BOXES</u></div>			
MAGNETIC TAPE DESCRIPTION	REEL OF _	REEL ____ OF	REEL O _____ F
PHYSICAL REEL NUMBER			
FILE IDENTIFICATION			
CREATION DATE			
END OF REEL (EOR) OR END OF FILE (E OF) SIGNAL			
NUMBER OF SUMMARIES			
NUMBER OF CARD IMAGES			
CHECK ADDITIONAL MATERIAL ENCLOSED AND FURNISH COUNT WHERE APPLICABLE:			
<div><input type="checkbox"/> _____ DD FORM 1498 SOURCE DOCUMENTS</div> <div><input type="checkbox"/> _____ MAGNETIC TAPE LISTINGS</div> <div><input type="checkbox"/> PUNCH CARD LISTING</div>			
REPORTING AGENCY		NAME & SIGNATURE OF RESPONSIBLE INDIVIDUAL	
DATE OF SUBMISSION		TELEPHONE NUMBER OF RESPONSIBLE INDIVIDUAL	

Figure 4-1



DEFENSE LOGISTICS AGENCY
DEFENSE TECHNICAL INFORMATION CENTER
CAMERON STATION
ALEXANDRIA, VIRGINIA 22314

REPLY
REFER TO

DTIC-TIM

SUBJECT: Work Unit Information System Input

TO:

1. Reference:

2. Your submission to the Work Unit Information System (WUIS) is reflected on the enclosed Contributor Summary Lists (CSLs) or DD Forms 1498m. Your data has been processed into the DTIC data base as follows:

a. _____ summaries were processed. At your request, printouts for these summaries are not returned.

b. _____ summaries were processed, but input contained errors which impair the quality of the data base. Prompt action to correct these errors is required. (Enclosure).

c. _____ summaries were processed which require accuracy review. (Enclosure).

3. Enclosure _____ is a listing of your input transactions which were processed and card images of any data which could not be processed. Error messages indicate the reasons for data rejection.

4. Enclosure _____ is a listing in accession number order of your records in the data base as of _____.

5. Magnetic tapes or punchcards are returned as follows:

a. Enclosure _____ is _____ magnetic tapes numbered:

_____ ()

_____ ()

_____ ()

b. Enclosure _____ is _____ boxes of punchcards.

FL-82

APR 81

Figure 4-2

DTIC Notification of Processing R&T Work Unit Data Base
(1 of ?)

DTIC-TIM

SUBJECT: Work Unit Information System Input

6. All transactions to correct errors or revise summaries must be submitted to DTIC in accordance with DLAM 4185.5, R&T Work Unit Information System Data Input Manual.

7. Questions concerning this material may be directed to Melvin T. Garret t., 202-274-6875 or AV 28-46875.

FOR THE ADMINISTRATOR :



VICTOR FURTADO
Chief., Data Base
Input Division

Encl

Figure 4-2

DTIC Notification of Processing R&T Work Unit Data Base
(2 of 2)